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EXAMINER

JARRETT, SCOTT L

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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4 BEFORE THE BOARD OF PATENT APPEALS
5 AND INTERFERENCES
6

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8 *Ex parte* LESLIE R. FINE,
9 BERNARDO A. HUBERMAN,
10 and PHILIP BLOCHER
11

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13 Appeal 2010-010260
14 Application 10/797,785
15 Technology Center 3600
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19 Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and
20 JOSEPH A. FISCHETTI, *Administrative Patent Judges*.
21 FETTING, *Administrative Patent Judge*.

22 DECISION ON APPEAL

STATEMENT OF THE CASE¹

Leslie R. Fine, Bernardo A. Huberman, and Philip Blocher (Appellants) seek review under 35 U.S.C. § 134 (2002) of a final rejection of claims 1 and 3-24, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

The Appellants invented a way for predicting future outcomes of uncertain events (Specification ¶ 0014).

An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced below [bracketed matter and some paragraphing added].

1. A method of finance forecasting, comprising:

[1] creating an information market

having a plurality of participants,

the information market being implemented on a computer system;

[2] determining at least one participant characteristic

of a participant

based on the participants behavior

within the information market;

[3] defining probability bins,

each of the probability bins

corresponding to a probability

¹ Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed April 13, 2010) and Reply Brief ("Reply Br.," filed July 6, 2010), and the Examiner's Answer ("Ans.," mailed May 5, 2010).

1 associated with an expected outcome;
2 [4] performing a query process
3 with the probability bins as assets,
4 wherein the computer system receives an input from the
5 participant;
6 and
7 [5] aggregating a result
8 of the query process
9 with weighting for the participant characteristic.

10 The Examiner relies upon the following prior art:

Kaplan US 7,155,510 B1 Dec. 26, 2006

Lundgren US 5,608,620 Mar. 4, 1997

11 Sarin, An Approach for Long Term Forecasting with an Application to
12 Solar Electric Energy (Management Science, Vol. 25, No. 6, June 1979)

13 Pennock, The Power of Play (NEC Research Institute Technical Report
14 2000-168; February 17, 2001)

15 Plott, Information Aggregation Mechanisms: Concept, Design, and
16 Implementation for a Sales Forecasting Problem, Social Science
17 Working Paper 1131, California Institute of Technology, March 2002

18 Claims 1, 3-6, 8-14, and 17-23 stand rejected under 35 U.S.C. § 103(a)
19 as unpatentable over Kaplan and Sarin.²

20 Claims 6-7 and 15-16 stand rejected under 35 U.S.C. § 103(a) as
21 unpatentable over Kaplan, Sarin, and Pennock.

² The Examiner also relies on administrative notice of the use of buckets in forecasting with probability analysis and presents Plott as evidence to support this finding.

1 Claim 24 stands rejected under 35 U.S.C. § 103(a) as unpatentable over
2 Kaplan, Sarin, and Lundgren.

3 ISSUES

4 FACTS PERTINENT TO THE ISSUES

5 The following enumerated Findings of Fact (FF) are believed to be
6 supported by a preponderance of the evidence.

7 *Facts Related to Claim Construction*

8 01. The disclosure contains no lexicographic definition of
9 “probability bin.”

10 02. The term probability bin as used in the disclosure Fig. 6 is that
11 of a range of an output variable that may be assigned a probability
12 of occurrence.

13 *Facts Related to Appellants’ Disclosure*

14 03. A market where the asset is information rather than a physical
15 good has the potential to provide some guidance on the prediction
16 of future outcomes. Specification ¶ 0015.

17 *Facts Related to the Prior Art*

18 *Kaplan*

19 04. Kaplan is directed to forecasting a wide range of values related
20 to human behavior including financial information for markets of
21 all kinds (bonds, stocks, government securities, commodity
22 futures), and to forecasting of sports scores, political elections, or

1 future events of any kind that can be quantified and for which
2 many people possess relevant knowledge. Kaplan 4:32-37.

3 05. Kaplan does this by generating a collective information for a
4 particular item from a plurality of raw information for that same
5 item by: gathering raw information from first entities for a
6 particular item; processing the raw information for the particular
7 item to generate a processed collective information for the item;
8 and communicating the processed collective information to second
9 entities. Kaplan 2:54-62.

10 06. Kaplan is used for generating quantitative forecasts, based on
11 the collective intelligence or data input of many individuals or
12 other entities whether human or not. Kaplan may incorporate
13 predictions from non-human agents as well as from human agents.
14 Various factual data may be utilized, such as public or proprietary
15 financial or economic data. The input from zero or more
16 computerized agents or other non-human entities may be
17 combined with zero or more human agents to produce a more
18 accurate collective forecast. This quantitative forecast finds
19 particular application to forecasting financial information such
20 as stock and bond prices, stock index values, interest rates,
21 international currencies, gold and precious metals, agricultural
22 product futures, and the like. Kaplan 4:38-62.

23 07. Kaplan weighs the individual forecasts by the likelihood that
24 the person making the forecast is correct. Kaplan 7:1-5. One of
25 ordinary skill knew that likelihood was a form of probability.

Sarin

08. Sarin is directed to describing an approach for long term forecasting and illustrating it with an application to forecasting solar electric energy market penetration by the year 2000. The approach can also be used for long term forecasting of other new technologies, fuel price and availability, and business performance, etc. Sarin 543: First ¶.

09. Sarin's approach utilizes multiple future scenarios to come up with alternative projections. The decision maker is also provided with the conditions under which high or low forecasts would result. Sarin 544:Second ¶.

10. Sarin describes aggregating the results of such scenario's by weighting the results by the experience of those providing the results. Sarin 551-552.

Plott

11. Plott is directed to information aggregation mechanisms. Plott: Title.

12. Plott provides evidence as to the use of result intervals (buckets) to collect data regarding frequency of occurrence in. Plott 7.

13. Plott associates these intervals with their probability. Plott 11.

ANALYSIS

The Examiner applied Kaplan for the bulk of the independent claims' limitations. Kaplan describes creating such an information market with

1 many participants (limitation [1]), each of whom is measured for their
2 experience in being right in forecasts (limitation [2]), defining discrete
3 results that might be expected from such financial product, each result then
4 being measured for the likelihood of occurrence (limitation [3]) querying the
5 participants as to such likelihoods of results (limitation [4]) and weighting
6 the results based on the participant's experience at being correct (limitation
7 [5]). The Examiner then applied Sarin and administrative notice for finding
8 ranges of values for such results in probability buckets and more explicit
9 descriptions of weightings. Thus, the Examiner did not apply Sarin and
10 administrative notice to alter Kaplan so much as to show the one of ordinary
11 skill knew that the scope of Kaplan's system was predictable modified to be
12 within the scope of the claims.

13 We are not persuaded by the Appellants' argument that the art teaches
14 away from using historical data or experts or accumulating or ordering
15 information. Appeal Br. 8-17; Reply Br.1-7. These arguments are not
16 commensurate with the scope of the claims as the claims do not recite the
17 use of historical data, experts, and organizing information. Also, none of
18 the references disparage such techniques or suggest using them would cause
19 failure.

20 What a reference teaches or suggests must be examined in the
21 context of the knowledge, skill, and reasoning ability of a
22 skilled artisan. What a reference teaches a person of ordinary
23 skill is not [] limited to what a reference specifically "talks
24 about" or what is specifically "mentioned" or "written" in the
25 reference. Under the proper legal standard, a reference will
26 teach away when it suggests that the developments flowing
27 from its disclosures are unlikely to produce the objective of the
28 applicant's invention. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir.
29 1994). A statement that a particular combination is not a

1 preferred embodiment does not teach away absent clear
2 discouragement of that combination. *In re Fulton*, 391 F.3d at
3 1199-1200. [] [A] prior art reference that does not specifically
4 refer to one element of a combination does not, per se, teach
5 away. If it did, only references that anticipate could be used to
6 support an obviousness analysis. However, prior art references
7 that are capable of rendering an invention obvious under a
8 section 103 analysis are not limited to reference that also
9 anticipate the patent at issue.

10 *Syntex (U.S.A.) LLC v. Apotex, Inc.*, 407 F.3d 1371, 1380 (Fed. Cir. 2005)

11 As to motivation to combine, again, Sarin and Plott merely elaborate on
12 implementation details for Kaplan's use of result likelihoods and weighting
13 of results. Whether one reference uses data sources different from another
14 merely shows the diversity of sources available, rather than obviating a
15 reason to combine.

16 CONCLUSIONS OF LAW

17 The rejection of claims 1, 3-6, 8-14, and 17-23 under 35 U.S.C. § 103(a)
18 as unpatentable over Kaplan and Sarin is proper.

19 The rejection of claims 6-7 and 15-16 under 35 U.S.C. § 103(a) as
20 unpatentable over Kaplan, Sarin, and Pennock is proper.

21 The rejection of claim 24 under 35 U.S.C. § 103(a) as unpatentable over
22 Kaplan, Sarin, and Lundgren is proper.

23 DECISION

24 The rejection of claims 1 and 3-24 is affirmed.

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